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ABSTRACT

In light of recent efforts in the United States to advance some type of universal health care package for all citizens, including preventive services for children, this report examines how other countries with universal health insurance provide preventive care to children, and what, if any, are the implications for reform efforts in the United States. Child health services in England, France, Germany, Japan, and the Netherlands are reviewed. The first portion of the document describes the scope and background of the study, as well as summary results, noting that although the five study countries provide universal access to preventive health care for all children, they do not rely solely on systems of universal coverage to ensure that all children receive services. Instead, these countries take one or more of the following actions to help secure this outcome: (1) notifying health authorities of new births; (2) targeting new parents for home visits; (3) providing convenient access to physical exams and immunizations; and (4) facilitating the continuity of care through the use of computerized tracking systems. Five appendixes make up the remainder of the document, outlining these nations' systematic approach to delivering preventive care, outreach activities that promote preventive care and remind parents of services, tracking systems that help ensure children receive services, and laws and regulations that provide entitlement to preventive care. A list of major contributors to the report makes up the fifth appendix. (MDM)

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ED 365 454

United States General Accounting Office

GAO

Report to the Chairman, Committee on Finance, U.S. Senate

August 1993

PREVENTIVE HEALTH CARE FOR CHILDREN

Experience From Selected Foreign Countries

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GAO

United States
General Accounting Office
Washington, D.C. 20548

Human Resources Division

B-250464

August 4, 1993

The Honorable Daniel P. Moynihan
Chairman, Committee on Finance
United States Senate

Dear Mr. Chairman:

About 12 million American children are not receiving basic preventive health care such as periodic physical examinations or childhood immunizations within the appropriate time interval.[1] This number includes poor and nonpoor children, some of whom may be covered by Medicaid or other health insurance.[2]

As the administration and the Congress consider adopting universal health insurance coverage, including preventive services for children, in a basic benefit package, you indicated that it would be useful to examine (1) how other countries with universal health insurance provide preventive health care to children and (2) what, if any, are the implications for reform efforts in the United States. You asked us to review the approaches to such care in selected European countries and Japan.

Scope and Methodology

Our review covered five countries: England, France, Germany, Japan, and the Netherlands. We selected the five countries because (1) their citizens have universal access to health benefits, (2) they are industrialized democracies with similar standards of living, and (3) they have developed specific strategies to target preventive health care to children.

Several factors limited our ability to develop data and to assess the effects of alternative national policies on the health status of children. First, no international health organization compiles uniform or detailed data specifically on preventive health services for children. Second, limited systematic and comparable data exist on the type, quantity, and spending for such services in the study countries. Although several nations have information on the health status of their population in general, they do not have sufficient information specifically on children that would allow us to determine the effects of national policies on improving children's health.

[1]Robert F. St. Peter, Paul W. Newacheck, Neal Halfon, "Access to Care for Poor Children," Journal of the American Medical Association, Vol. 267, No. 20 (May 27, 1992), pp. 2760-2764.

[2]In 1991, Medicaid, which is a joint federal and state program, paid for health care for 28 million low-income Americans, including 13 million children (to age 21). Under Medicaid, these children are eligible for preventive services through Medicaid's Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) program.

We also had no basis for determining the cost-effectiveness of the specific measures taken in the study countries.

To obtain information on health care policies in the study countries, we

- interviewed national and local health officials, health policy experts, and health professionals;
- analyzed national policies and laws pertaining to the delivery of children's health services and reviewed relevant studies; and
- visited selected communities in each country to observe preventive health care in preschools, community health clinics, physicians' offices, and children's hospitals.

We sent copies of the draft report to key officials in the study countries and included their comments as appropriate. We conducted our review between October 1991 and October 1992 in accordance with generally accepted government auditing standards.

Background

While the study countries have political and social philosophies that differ, they tend to have similar philosophies of care that emphasize the special needs of children. Preventive health services for children include periodic physical examinations, immunizations, tests that screen for illnesses or developmental problems, dental care, health education, and guidance to parents on the importance of preventive care. In each country, most residents have basic health care coverage that provides nearly universal access to health care, including preventive care services for children.

In the study countries, health services for children have increased significantly since World War II. After the war, each government enacted laws and took other actions to address the health needs of its citizens, facilitate access to preventive care, and ensure that such care was provided. Entitlement to these services is generally based in national laws and policies. This entitlement extends to all children regardless of their social and economic status. For example, a 1945 law in France established guidelines for free services to women and children. Other national policies authorized physical examinations for children at specific ages and the hiring of health professionals to provide the services. In Japan, the government established the Children's Bureau in 1947 and began mandatory immunizations against various diseases in 1948.

Preventive care services are integrated into a health care delivery system that has defined responsibilities for government, health care providers, parents, and sometimes insurance organizations.[3] In general, governments assume responsibility for access to preventive care services for children. Health care providers are typically responsible for offering these services at common fee schedules to anyone who seeks them. Parents are generally responsible for selecting the health care provider, for obtaining recommended services, and for monitoring their child's health. Finally, insurance organizations are sometimes responsible for financing and promoting preventive care services.

Results in Brief

Although the five study countries provide universal access to preventive health care for all children, they do not rely solely on systems of universal coverage to ensure that all children receive services. Instead, these countries take one or more of the following actions to help secure this outcome:

- notify health authorities of new births, which initiates monitoring and, in some cases, providing preventive health services;
- emphasize the importance of regular care by targeting new parents for home visits, by providing booklets for maintaining a child's health record, and by conducting information campaigns;
- provide convenient access to physical exams and immunizations by making them available in schools; and
- facilitate the continuity of care through the use of computerized tracking systems.

As in the other countries, the United States may see fit to consider such special measures if it, too, would seek greater assurance that all children receive preventive services. But the measures would require careful, studied consideration, given the current limited knowledge of their cost and real health consequences.

[3]France, Germany, and Japan rely on "sickness funds" or "insurance societies," which are primarily employment-based organizations but which are not strictly comparable to American insurance companies.

Access and Notification Facilitate Preventive Care in Various Settings

In the five foreign countries, parents or hospital officials are required to notify health authorities of new births because these authorities are responsible for providing access to an immediate source of care for the child. In some countries, such notification can occur when a woman becomes pregnant. The notification provides general information about the baby as well as any special circumstances about the baby or the family, such as a premature birth or single parenthood.

Notification of pregnancy or birth in the four European countries and Japan is designed to trigger the automatic inclusion of children in a network of preventive care services. Through the notification process, municipal and district health officials are made aware of new births, initiate access to care, and begin tracking services.[4]

In the study countries, notification is intended to lead to a home visit by a nurse. Three of the five countries also mail information to the home, such as information on the location of services or the schedule of upcoming immunizations. In England and the Netherlands, notification also is meant to trigger the automatic tracking of a child's immunizations. In short, notification is used to facilitate comprehensive provision of health services.

While children can receive care in many settings, such as hospitals, physicians' offices, and community clinics, the most notable differences between service delivery in other countries and in the United States are the more extensive use abroad of home visiting for newborns and health services in schools. These programs help ensure that services reach children who need them and, although entitled, might not otherwise receive them.

Home Visiting Provides Additional Access to Care for Newborns

Unlike the United States, four of the five countries have organized national home visiting programs that are part of universal systems of health care. Home visiting nurses help assess the medical needs of the newborn, observe the social environment of the family, and, in some countries, provide preventive health services. In the programs in England and the Netherlands, nurses usually visit virtually all newborn babies within the first 2 weeks after they arrive home. In France and Japan, public health nurses are to selectively visit newborns on the basis of certain medical or social risk factors, such as low birth weight, single parents, or immigrant

[4]Birth records in the United States are used primarily to maintain vital records rather than to provide access to health care.

parents. Although Germany does not have a national home visiting program, officials told us that health professionals make home visits as necessary. In England, France, and the Netherlands, visiting nurses can conduct certain medical screening tests and immunize children.[5]

Health Services in Schools Increase Access to Preventive Care

In the five study countries, children who are enrolled in school can receive preventive care services in school. In England and Germany, public health physicians and nurses perform preventive care examinations at school. Similarly, in France and Japan, health care professionals from the Department of Education perform physical examinations at school. In the Netherlands, a school health service in each municipality provides preventive services to children at school.

In France, Germany, and the Netherlands, most children can receive from one to four physical examinations in school. In Japan, school children age 6 to 16 can receive annual examinations in school. In England, school examinations are targeted to children with special needs, and consultations with school nurses or physicians are available on demand. School health authorities told us that during these examinations they generally emphasize screening for hearing, vision, and developmental problems.

In France, children can receive preventive care in preschool programs, including licensed day-care centers and nurseries. About 98 percent of children are enrolled in preschools by age 4, where they typically receive their first compulsory physical examination.[6]

[5]In the United States, home visiting programs are limited in number and in the services that they provide. Many programs provide educational or social services rather than preventive health care. In an earlier report, we noted that such programs often focus on families with low incomes or families with children who have handicaps or other special needs. (See Home Visiting: A Promising Early Intervention Strategy for At-Risk Families [GAO/HRD-90-83, July 11, 1990].)

[6]Although the cost-effectiveness of this approach has not been adequately researched in the United States, some researchers believe that American schools could provide a central location to reach a large number of children, particularly children who might not otherwise receive care or who lack a regular source of care.

Although the number of clinics in American schools has increased in recent years, they are not widely available. By 1991, there were 327 clinics affiliated with elementary, junior high, or high schools throughout the United States.

Information Campaigns and Other Outreach Activities Foster Participation in Preventive Care

Information campaigns and other outreach activities are an important way to inform parents about the benefits of preventive care. To make parents aware of children's preventive health services and to encourage them to participate in their child's care, the five study countries use child health booklets and public campaigns, including direct mailings and outreach to special populations.

Child Health Booklets Used to Promote Scheduling of Care

The five study countries provide parents with a child health booklet after notification of a birth or pregnancy. The booklets include a recommended timetable for scheduling immunizations and other preventive care visits and, in certain countries, they serve as a record of services rendered to each child. Some countries' booklets also include information on various child-rearing topics, available services, and certain rights and obligations with respect to the child's health. Parents are expected to bring the booklet with them each time their child receives services.

For example, France's health booklet cites the legal obligations of parents to present the booklet to health care providers and of providers to record information in the booklet. Japan's health booklet provides information on the obligation of mothers to register births, the rights of working parents to certain benefits, and the rights of children to certain treatments. Some versions of Japan's booklet provide information on the availability of government subsidies for chronically ill or disabled children. A major advantage of the booklet is that it involves parents in the care of their child. Using the booklet helps parents to understand the health care needs of their child and to take specific actions to meet those needs.[7]

Public Campaigns Used to Promote Children's Health

In addition to home visits and booklets, the four European countries and Japan try to inform parents through public campaigns, which include direct mailings about children's preventive health services, multimedia health promotion campaigns, and parent-education workshops. Local health authorities told us that they use birth notifications to develop mailing lists. For example, local health authorities in England and the Netherlands use computerized mailing systems to issue periodic reminders of immunizations and other services.

[7]The Omnibus Budget Reconciliation Act of 1989 required the Secretary of Health and Human Services (HHS) to develop a child health booklet in consultation with the National Commission to Prevent Infant Mortality as well as interested public and private organizations. The booklet (or "health diary") became available in May 1993. It is free to women in HHS's Healthy Start program. (Healthy Start is a demonstration project in cities with high rates of infant mortality.) Other women can get copies from their doctors or from HHS for $4.25.

In France, special "mother and infant" offices mail brochures and other material on the value and availability of services to new parents. In Germany, health promotion for children is combined with health financing through regulated insurers, called sickness funds, which are required to promote preventive health care. For example, one sickness fund, which insures almost half of the population, sends new parents information about the recommended schedule of preventive care examinations. Other organizations, such as public health offices in each municipality and the German Green Cross, also send health information to parents.

Health authorities and other agencies in the five countries try to reach parents through periodic public health campaigns, including multimedia health promotion campaigns and parent-education workshops. Generally, such campaigns also include literature distributed to doctors' offices and other health facilities, especially places visited by children from socially disadvantaged or immigrant families. These efforts are aimed at supplementing the structural preventive care components in place in the countries.

In England and France, the national health ministries conduct multimedia health promotion campaigns to promote immunizations and to introduce new vaccines, such as the combination measles, mumps, and rubella (MMR) vaccine. In 1990, the National Health Service in England adopted a financial incentive program to motivate general practitioners to increase immunizations and to promptly report the results.[8] Officials from the Department of Health reported that most general practitioners are participating in the incentive program and that the program has contributed to recent increases in immunization coverage.

In Japan, local health authorities and centers use various methods to promote preventive care. Some localities publish the dates of various health center activities, including preventive care examinations and vaccinations, in local newsletters received by virtually all parents. In the Netherlands, the National Association for Home Care, the Health Education Center, and the District Public Health Service distribute information to local health centers, clinics, and schools. These groups and others reportedly make special efforts to provide literature and instruction to families of different ethnic backgrounds.

[8]In England, general practitioners are paid at a higher fee-for-service rate when they fully immunize 90 percent or more of the children in their practices by age 2. They receive no fee when 70 percent or less of the children are fully immunized.

National Tracking to Help Ensure That Children Receive Preventive Care

National tracking systems seek to ensure that children receive continuous and comprehensive preventive care services. England and the Netherlands use some form of tracking or monitoring designed to confirm that children receive preventive care services. The other countries provide individual health care providers or parents with booklets that contain information on each child. They do not have national systems that allow monitoring of the health status of all children.[9]

In England and the Netherlands, medical records are required to be systematically collected and centrally maintained to help health authorities identify and track children in need of preventive care services.

These two countries maintain computer and manual records on the preventive care services that individual children receive. Health officials use these records to inform parents of scheduled services, identify children who have missed their immunizations, remind the parents to reschedule a visit, and notify visiting nurses when additional follow-up is required. These records may also be used to assess services provided to entire communities and to allocate limited health care resources for targeted outreach and promotional activities. In both countries, access to confidential health information is limited to specific health care professionals.

Health Care Reform Implications

In addition to providing universal access to care, the five study countries have taken specific measures to provide preventive care to children. Unfortunately, we were unable to obtain outcome or cost data to assess the effectiveness of measures that include notification to health agencies of pregnancies or births, home visits to encourage or assist parents in obtaining care for their children, tracking children's care, and health services in schools. Moreover, it is unclear whether a sustained commitment to measures such as the ones taken in the study countries would achieve increased participation in children's preventive health services in the United States, particularly among lower income American children.

Nevertheless, as the Congress deliberates health care reform, including universal access to care, it should be aware of the special measures taken

[9]The United States does not maintain a national tracking system. However, the Centers for Disease Control and Prevention (CDC) plans to fund several demonstration projects, including a project to pilot test alternative methods of measuring immunization coverage. The methods could include national registration of children using birth certificate information or reporting to a central data bank of the vaccinations given by a health care provider.

by other countries that already have universal access in place. These measures were taken as part of efforts to provide all children with preventive health care. However, in considering such measures, the Congress should take into account the limited state of knowledge of costs and health consequences.

We will send copies of this report to interested congressional committees and make copies available to others on request.

If you or your staff have any questions, please call me at (202) 512-7119. Other major contributors are listed in appendix V.

Sincerely yours,

Mark V. Nadel

Mark V. Nadel
Associate Director, National and
Public Health Issues

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Abbreviations

CDC	Centers for Disease Control and Prevention
DTP	diphtheria, tetanus, and pertussis vaccine
EPSDT	Early and Periodic Screening, Diagnosis, and Treatment
HHS	Department of Health and Human Services
MMR	measles, mumps, and rubella vaccine
PMI	Protection Maternelle et Infantile (Protection of Mothers and Infants)

Systematic Approach to Delivering Preventive Care

In the five study countries, children are entitled to comprehensive and continuous preventive care services that are an integral part of the health care system.[1] The services are provided to children residing in each country without means-testing requirements (that is, eligibility is not based on family income). Responsibility for establishing a regular source of primary care for children is shared by the government, health care providers, and parents. Each country also tries to facilitate the actual provision of care through systems that provide notification of births or pregnancies and provide more accessible sources of care. Typically, notification of a birth or pregnancy triggers the provision of services. In each study country, children's preventive care services are readily available and accessible from various health professionals at multiple locations.

High Proportion of Children in Study Countries Receive Preventive Care

In the five study countries, between 80 and 97 percent of infants (from birth to age 1) have received the recommended preventive care since 1987. For preschool children, 52 percent or more of them have received the recommended preventive care. For school children, 58 percent or more have received such care.[2]

Provision of preventive care services in the study countries can be grouped into three categories: (1) newborn care (the first few weeks of life); (2) infant and preschool care (age 1 month to age 6 or 7); and (3) school care (between age 5 or 6 and age 17 or 22). Table I.1 summarizes the organization of preventive care services in each country by age group.

[1]Appendix IV presents the legal basis for entitlement in each country.

[2]We were able to find comparable data only for American preschool children: 42 percent received the recommended preventive care in 1987. (See P.F. Short and D.C. Lefkowitz, "Encouraging Preventive Services for Low-Income Children: The Effect of Expanding Medicaid," Medical Care, Vol. 30, No. 9 [Sept. 1992], pp. 766-780.)

Table I.1: Organization of Preventive Care Services

Country	Newborn care	Infant and preschool-age care	School-age care
England	First exam performed in the hospital; all mothers seen in the home by health visitors about 10 days after birth	General practitioners provide most care; public clinics also provide care in urban areas	School nurses and physicians provide exams to children with special needs or on demand
France	First exam performed in the hospital; clinic nurses then visit the homes of all children at medical or social risk	Private physicians provide about 70 percent of care; the remainder is provided in clinics, crèches, and preschools	Education authorities provide one or two exams in school, with optional exams on demand, and student counseling sessions
Germany	First two exams performed in the hospital; public health office nurses sometimes visit socially disadvantaged families	Private pediatricians or general practitioners provide about 90 percent of care; the remainder is provided by public health offices	Public health offices generally offer three exams in school, but significant variation exists by region
Japan	Initial screening is performed in the hospital; public health nurses then visit homes with low birth weight babies and others as needed	Public health centers deliver most care, with the rest rendered by private clinics and hospitals	Health and education authorities provide annual exams in school and health education
The Netherlands	Initial exam done by a physician at home or in a hospital; public health nurses then visit new mothers within 2 weeks of birth to perform other screening tests	Public infant and toddler clinics provide about 95 percent of care, with the rest done privately	Municipal or district health authorities provide between four and six exams in school or in health centers

In England, France, and Germany, general practitioners or pediatricians primarily render preventive care services. The number, type, and reporting of services by these physicians are regulated by law in France and Germany and by a contract with district health authorities in England. In Japan and the Netherlands, public centers or clinics provide most preventive care.[3] Specialized training in preventive care is required in England, Germany, and the Netherlands.

[3]Appendix IV contains a description of the laws and regulations in each study country.

Immunizations constitute an important component of preventive care for children. (Immunization rates can be used as a proxy for children's participation in preventive care.) Currently, most children in the study countries receive the recommended schedule of immunizations, although only France and Japan legally require children to be immunized.[4] Table I.2 shows that 85 percent or more of children receive the recommended schedule of immunizations by age 2 in two of the five countries we reviewed.

Table I.2: Percent of Children Fully Immunized by Age 2

		DTP[a]		Polio[b]		MMR[c]
Country	Year	%	No. of admin.	%	No. of admin.	%
England	1990	85	3	90	3	89
France	1991	85	4	85	4	64
Germany[d]	1991	65-70	4	80-85	3	65-70
Japan	1991	85-90	3	90-95	2	65-70[e]
Netherlands	1992	94	4	94	4	94

[a]DTP is a combination vaccine for diphtheria, tetanus, and pertussis.

[b]The polio vaccine is administered by injection or orally, generally at the same time as the DTP.

[c]MMR is a combination vaccine for measles, mumps, and rubella. Because some study countries recently began using the MMR vaccine, rates are still relatively low.

[d]National immunization rates are not available in Germany. However, these estimates were provided by the ministry official in charge of immunizations. According to this official, the figure for the full DTP series is low in Germany because many physicians still resist giving the pertussis part of the vaccine. The figure for the MMR series is also low because this vaccine has only recently been promoted.

[e]This rate represents children receiving MMR or measles vaccinations.

Source: GAO obtained most data from documents provided by senior officials in each country's ministry or department of health.

[4]In the United States, about 97 percent of children age 6 or older receive the recommended immunizations because states require proof of immunization when a child enters school. However, the proportion of children under age 2 who received the appropriate immunizations is substantially below 90 percent. CDC obtained immunization data from 16 states between 1988 and 1990 that showed the median immunization rate for fully immunized preschool children was 57 percent. (See Childhood Immunization: Opportunities to Improve Immunization Rates at Lower Cost [GAO/HRD-93-41, Mar. 24, 1993], p. 12.)

Notification of Pregnancy or Birth Initiates Entitlement to Preventive Care Services

To varying degrees, notification of a pregnancy or birth automatically initiates the delivery of preventive care services in the five countries. Through the notification process, municipal and district health officials become aware of new births, initiate home visits, and begin tracking services. (See app. III for a discussion of tracking systems.) The notification process is the first step in the delivery of preventive care services to children, including children with special needs.

While the five study countries have political and social philosophies that differ, most residents in each country have basic health care coverage that provides near-universal access to health care, including preventive care services for children. All children are entitled to these services irrespective of their social and economic status. Parents generally are not charged for preventive care visits to public or private health care facilities.

In all study countries, preventive care visits typically include conducting physical, developmental, and behavioral assessments; tracking a child's medical history; providing parental guidance; and administering immunizations and sensory screening and other tests. For children in the first year of life, the number of recommended visits ranges from two in Japan to nine in France and the Netherlands. While Japan has the lowest number of recommended visits before age 6, it offers annual health examinations in school for children between age 6 and 16.

Broader Access to Care May Increase Participation in Services

Establishing a regular and accessible source of primary care for children may increase participation in preventive care services.[5] As in the United States, parents in other countries are responsible for obtaining preventive care for their children. In the study countries, parents have relatively easy access to preventive care services for their children and are informed frequently about these services.[6] In most study countries, parents have a choice of obtaining preventive care services from public or private providers, both of which are readily available throughout the country.

As in the United States, children in the study countries receive care in physicians' offices, clinics, and other settings. Some notable features in the

[5]Healthy Children: Investing in the Future, U.S. Office of Technology Assessment (Washington, D.C.: 1988), p. 119.

[6]Bret C. Williams and C. Arden Miller, Preventive Health Care for Young Children: Findings From a 10-Country Study and Directions for U.S. Policy (Arlington, VA: National Center for Clinical Infant Programs, 1991), p. 31.

study countries are the extensive use of home visiting for newborns and health services in schools.

Providers Abroad Seem More Easily Accessible

Parents in other countries have easy access to preventive care for their children. Preventive care services for young children are readily available and accessible from various providers at multiple locations.

In England, parents may choose to obtain preventive care services for infants and preschool children from general practitioners or about 3,000 community clinics, although the Department of Health encourages the use of general practitioners. In addition, health visitors assist clinics and physicians by visiting homes of children who do not attend scheduled preventive care visits. Most families have a general practitioner and attempts are made to locate physicians within distances convenient for parents.

Most general practitioners receive additional training and payments for providing child health surveillance and immunizations. Community health clinics, staffed by district pediatricians and nurses, still play an important role in providing preventive care, especially in urban areas where general practitioners are less likely to take on these responsibilities. In communities where general practitioners provide most preventive care, health clinics focus on services to children with special needs. A child's general practitioner serves as a gatekeeper to monitor referrals for specialized treatment.

In France, parents can choose a public or private provider for the mandatory examinations that a baby must receive after it leaves the hospital. Health officials told us that about 70 percent of children receive preventive care from private general practitioners or pediatricians. The remaining 30 percent of children attend maternal and child health centers, hospitals, schools, or day-care centers.[7] While maternal and child health clinics are open to all children, they are generally located in areas that serve disadvantaged children. They concentrate on serving medically or socially disadvantaged families. In such areas, a maternal and child health clinic may serve 50 percent of the preschool children.

While private physicians offer a regular source of primary care, public providers must offer a range of family health services and employ a variety

[7]In France, maternal and child health centers are called "Protection Maternelle et Infantile," or Protection of Mothers and Infants programs.

of health professionals. If a maternal and child health center physician detects a health problem during an examination, the physician must refer the patient to a private physician or to a hospital and must ensure that the child receives suitable care. To ensure continuity of care, public providers must maintain records on children. By law, maternal and child health clinics must transfer medical records to school physicians when the child enters school.

In Germany, preventive care services for infants and preschool children are primarily provided by private pediatricians and, to a lesser extent, general practitioners. Today, there is an oversupply of private physicians who are obligated to provide preventive care services. Therefore, parents do not face a problem in obtaining services. Private physicians serve as a regular source of primary care, and they receive special training to perform the recommended preventive care examinations after the infant leaves the hospital. Municipalities also provide limited preventive care services (e.g., immunizations) through public health clinics. The clinics generally serve socially disadvantaged and immigrant people who may not be insured. Public health offices provide extensive counseling and other services that private physicians may not have the time to do. In Germany, parents can go directly to a specialist for treatment without a referral from the child's pediatrician. However, in practice, the primary care physician usually makes the referral.

In Japan, most parents obtain preventive care services for preschool children from a network of community health centers operated by their municipality. However, some municipalities give parents coupons for private clinics and hospitals to alleviate the workload of health centers and to provide additional options in obtaining services. A variety of health professionals at these centers promote maternal and child health by providing infant health examinations, home visits by public health nurses, and other services. For example, officials at the Kyoto prefecture said that the prefecture's health centers primarily examine 3-year-old children, and the municipal health centers examine children who are 3 months, 6 months, and 18 months old. The schedule of examinations may vary among local governments but generally follows the nationally recommended schedule. Community health centers refer children to private physicians when problems are detected during an examination. Parents may also seek specialized treatments without a referral by the child's primary care physician.

In the Netherlands, most parents obtain preventive care services from a network of 6,000 or more well-baby and well-toddler clinics. With the exception of Amsterdam, the National Association for Home Care manages clinics for preschool children from birth to age 4. In Amsterdam, the Municipal Health Authority manages about 30 clinics. About 80 to 92 percent of the preschool children attend public clinics for the 11 recommended preventive care examinations. Clinic nurses and pediatricians generally provide preventive care. In some areas, general practitioners (who usually are responsible for acute care) work in community clinics after they receive special training in preventive care. Community clinics also maintain records on each child's medical history, including referrals. If a problem is detected during a routine preventive care examination, the child is referred to a general practitioner.

Home Visiting Provides Additional Access to Care for Newborns

As in the United States, health professionals in the study countries perform detailed examinations of newborn children before they leave the hospital. In the other countries, as in the United States, most children are born in hospitals, where they are screened for certain disorders and receive one or two preventive care examinations. In the Netherlands, about 35 percent or more of children are born at home, where the family physician generally performs the neonatal examination.

Four of the five study countries have organized national home visiting programs that are part of a universal health care system. Home visiting is important because nurses and other health professionals can assess the special needs of the newborn, observe the social environment of the family, and in most study countries, provide preventive care. In the study countries, home visits are made by public health nurses, whose primary function is to provide information and preventive care advice to parents, including counseling about having a regular source of care for the child with a public or private provider. In some cases, properly trained visiting nurses may provide medical services such as immunizations. Parental guidance can include preventive care advice, health and nutritional education, and social support. The nurses may continue to visit a home, as needed, until the child reaches school age.

In England and the Netherlands, health officials told us that a nurse visits most newborns at home within 2 weeks of their births, although there is no independent survey of the actual extent of coverage. In France and Japan, public health nurses selectively visit newborns based on certain medical and social risk factors such as low birth weight, single or young

mothers, or immigrant families. Germany does not have a national home visiting program; however, home visits are made in exceptional cases. In England, France, and the Netherlands, visiting nurses conduct medical screenings and immunize newborns.

The cost-effectiveness of home visiting programs has not been clearly established in these countries. Nevertheless, researchers and others view this program as a source of health education for parents of infants and preschool children. A survey published in 1989 revealed that English mothers value home visiting services as a source of advice on infant care and as a way to avoid social isolation.[8] This study found that health visitors are welcomed because the services are well-known, universal, and free of social stigma. Likewise, officials in the Netherlands have credited the success of their immunization program in part to the promotional efforts of visiting nurses.

Preventive Care Services in Preschools and Schools Increase Access

The five countries in our study augment service delivery for young children by providing care in schools. While examinations can be performed by the child's private physician, children in all study countries receive preventive care in schools, where local health authorities are responsible for administering examinations. In England and Germany, public health authorities provide physicians and nurses who perform preventive care examinations. In France and Japan, the Department of Education is responsible for providing the health care professionals. In the Netherlands, the school health service in each municipality is responsible.

In the five countries, physical examinations are generally available to children at school when they enter. For example, in France, Germany, and the Netherlands, most children receive from one to four physical examinations in school. In Japan, school children (age 6 to 16) receive annual examinations in school. English health officials told us that full developmental examinations are given to children with special needs.

While the frequency and extent of school examinations in the countries vary, health authorities told us that they generally emphasize screening for hearing, vision, and developmental problems. The examinations may also include screening for motor skills as well as for psychological and sociological problems. When a problem is identified, the child is referred to a general practitioner or to a specialist. For example, health officials in

[8]Berry Mayall and Marie-Claude Foster, Child Health Care: Living With Children, Working for Children (Oxford, England: 1989), pp. 83-86.

Germany and the Netherlands told us that referrals occur with about 20 percent and 9 percent, respectively, of all examinations at school. In most countries, health, education, or social services authorities monitor children with special needs during their school years. Health authorities place special emphasis on healthy lifestyles. As in the United States, health education is a compulsory subject at schools.

Children can also receive preventive care at licensed day-care centers, nurseries, and other preschool settings. In some study countries, children age 3 to 5 attend preschools that are subsidized and regulated by the government at little or no cost to their parents.[9] For example, by age 4, about 98 percent of French children are enrolled in preschools ("écoles maternelles"), where they typically receive their first compulsory physical examination. Many European children under age 3 are enrolled in nursery schools, where they may receive limited preventive care.

[9]Williams and Miller, 1991, pp. 37 and 79.

Outreach Activities Promote Preventive Care and Remind Parents of Services

The five countries reviewed make deliberate efforts to inform parents about preventive health services for their children. In addition to home visiting, which was discussed earlier, these efforts include child health booklets, direct mailings, and public campaigns. Several countries also have outreach programs that inform parents for whom conventional outreach efforts are inappropriate because of language barriers, economic circumstances, or other problems.[1]

Health experts contend that these activities promote healthy lifestyles and could lead to decreases in mortality and morbidity rates for children. To promote preventive care, the five study countries routinely send parents information before or after their child's birth. The information advises them about the importance of preventive care and availability of such care in the local area.

Table II.1 highlights outreach and promotion activities in the study countries.

Table II.1: Outreach Activities to Promote Preventive Care Services

Country	Child health booklets	Direct mailings	Public health promotion	Outreach to special groups
England	X	X	X	X
France	X		X	X
Germany	X	X	X	
Japan	X		X	
The Netherlands	X	X	X	X

Note: This table shows only those promotional programs and efforts that are widespread in each country; however, we found that strategies not marked were used by local health offices in France, Germany, and Japan.

Child Health Booklets Used to Promote Preventive Care

The study countries issue child health booklets to parents to inform them about preventive care and, in some cases, the acute care of children. In most countries, the booklet is a document in which parents and health professionals record the services provided to a child between birth and age 5 or 6. In France, parents monitor the care of children to age 20. In some countries, the booklets are also used to transfer medical records

[1]American health officials indicated that many lower income children do not receive preventive care because their parents are not aware of its importance. Information campaigns and other outreach activities are an important way to inform parents of the benefits. Poorer children and their families reportedly do not participate in the Medicaid program in part because states do not effectively inform eligible families about the program.

when a family moves or changes health care providers.[2] In England, Japan, and the Netherlands, the booklets contain space for parents to record information about their child's development. In England, France, and Germany, the booklets contain tear-out sheets or carbon forms that can be retained by the health care provider or used to report to a government office what services were rendered.

Officials told us that the success of these booklets depends on parents and providers properly and conscientiously using them. Some countries have mechanisms in place to ensure or increase their use. For example, officials in France use laws and financial incentives to ensure that parents and providers use the booklets. On the other hand, Japanese officials told us that mothers generally feel a social obligation to use the booklet. Table II.2 presents the key attributes of each booklet. Following the table is a discussion of the booklets' functions.

Table II.2: Attributes of Child Health Booklets

Country	Monitoring tool for physicians and parents	Transferable medical records to new provider	Contains forms for reporting to health authorities
England	X	X	X
France	X	X	X
Germany	X	X	X
Japan	X	X	
The Netherlands	X		

In the study countries, notification of the birth or of the pregnancy results in parents receiving a child health booklet. In England, district health authorities notify health visitors of a new birth. Then the nurse or other health visitor contacts the new parents to deliver the "Personal Child Health Record." Alternatively, these booklets are given to new mothers by a midwife in the hospital. In France, when parents register a birth with the municipality, they receive a child health booklet called the "Carnet de Santé." This booklet may also be obtained from a local PMI[3] office. In Germany, hospitals provide new parents with the "Kinder-Untersuchungsheft" (Child Examination Booklet), while in Japan, the mother receives a "Maternal and Child Health Handbook" after registering her pregnancy with the local government. Finally, in the Netherlands, after parents comply with the obligatory municipal

[2]In the Netherlands, most preschool children receive preventive care through community health clinics run by the Dutch National Association for Home Care. The clinics keep medical records on all children and transfer the records when a child moves or enters school.

[3]Protection Maternelle et Infantile.

registration, the local health authority sends a district nurse to the home of new parents to deliver the "Growth Book" and to provide other information.

Most child health booklets contain the recommended schedule of immunizations and preventive care examinations, and some countries allow local governments to add information related to their areas. The health booklet in the Netherlands contains the immunization schedule but does not contain the schedule of preventive care examinations. However, visiting nurses advise new parents on scheduling their child's first visit. In Germany, a child's primary care physician gives new parents a separate card for recording immunizations.

In addition to the recommended schedule of preventive care visits, some booklets contain advice to parents on child-rearing and other topics. For example, the child health booklets in England, Japan, and the Netherlands contain guidance on topics such as accident prevention, feeding, nutrition, symptoms of illnesses, teething, and normal development. Several booklets assist parents in obtaining services. England's booklet refers mothers to health visitors for assistance. Japan's booklet may contain information on local health centers and other providers of preventive care services. In the Netherlands, the booklet provides addresses for obtaining information on topics such as the care of handicapped children and the availability of educational videotapes.

Some booklets contain a description of parents' rights and obligations regarding their child's health. For example, France's health booklet cites the legal obligations of parents to present the "Carnet de Santé" to health care providers and the obligation of providers to record information in the booklet. Japan's health booklet contains information on registering births, on the availability of governmental subsidies, on certain benefits for working parents, and on the rights of children to certain treatments.

Descriptions of the child health booklets follow.

England's "Personal Child Health Record"

The English "Personal Child Health Record" is a 50-page booklet that was introduced in 1990 as a tool for increasing parental involvement in the care of children between birth and age 5. In addition to sections for parents and physicians to track immunizations and other services, the booklet contains

information and advice on when to call the doctor, dental care, immunizations, accidents, and other topics.

As a transferable record, the booklet contains sections in which health professionals record services provided to children until they enter school. Health officials told us that the medical information in the booklet is available immediately, while medical records can take 6 months to be transferred between local districts.

Some sections of the booklet include carbon forms for use by the provider and local health officials as a record of services and outcomes for each child. This information, in conjunction with birth registration data, allows officials to monitor service delivery and the health status of the community, as well as to identify children who have missed preventive care visits.

The booklet also contains sections for parents to record pertinent information such as the family's medical history, the child's developmental history, and issues to discuss during the next visit. Health officials stressed that the booklet makes parents equal partners in the care of their children.

France's "Carnet de Santé"

The "Carnet de Santé" (Health Booklet) is an 80-page booklet that was introduced in 1974. It is used throughout France as a transferable medical record for children between birth and age 20. It is also used for tracking preventive health care services and outcomes for children to age 3.

The booklet contains sections in which providers record birth details, neonatal examinations, medical surveillance, growth measurements, immunizations, hospitalizations, and various medical consultations. By law, the results of preventive care visits must be recorded in the booklet.

The booklet contains certificates and forms that a physician completes during a child's 8-day, 9-month, and 24-month examination. The information is used by local health officials to identify families at risk for medical or social problems. Parents receive a copy of the certificate, which they present to a local social security office to receive a stipend for each examination.

Germany's "Kinder-Untersuchungsheft"

The "Kinder-Untersuchungsheft" (Child Examination Booklet) is a 30-page booklet that was introduced in 1971. It is used throughout Germany as a transferable medical record and a tool for monitoring the health status of children under age 6.

The booklet contains forms for recording outcomes and observations for each preventive care examination. Officials are considering the addition of immunization information.

Physicians send copies of the completed examination forms to the regional Association of Statutory Health Insurance Physicians, which administers physician payments for services provided to about 90 percent of the population. The association uses the data to monitor chronic illnesses and the overall health of children.

The regional associations do not collect data on children who are not insured by a sickness fund (about 10 percent of the population). They also do not collect personal information such as a child's name or address. As a result, the data are not used to track the health status of individual children. For historical reasons associated with World War II, the associations do not share the data with regional or national governments.

Japan's "Maternal and Child Health Handbook"

Japan's "Maternal and Child Health Handbook" was introduced in 1942. It is used as a transferable medical record and a tool to help parents monitor their own health and the care of their child. The booklet covers a woman's pregnancy and the child's health until age 6.

As a transferable medical record, the handbook helps ensure continuity of care between public clinics and primary care physicians. It contains sections for health care professionals to record details on the birth, health and dental checks, immunizations, growth measurements, and illnesses. The handbook also contains sections for the mother to record information about herself (e.g., past illnesses and pregnancies, social and occupational information) and about the child (e.g., conditions of the birth, development of the child at different stages of life, and any childhood diseases).

The Netherlands' "Growth Book"

The Netherlands' "Growth Book" was introduced in 1967. It provides advice to parents and helps involve them in monitoring their child's development to age 5. The booklet contains sections for the parent to record information on the child's mental and physical development, vaccinations, diseases, hospitalizations, growth measurements, and results of well-child visits. The booklet also contains pages for noting advice given, questions to ask, as well as useful information about different stages of the child's life.

The booklet does not contain a section for health care providers to complete or forms for reporting purposes. However, the booklet complements existing reporting and tracking systems.

Mailings and Advertising to Encourage Continued Use of Preventive Care Services

Health officials in each study country told us that information is mailed to new parents to encourage the use of preventive care services. They identify new parents using birth notification data or tracking system data. In England and the Netherlands, local health authorities send parents information and specific reminders about scheduled preventive care visits. In France, Germany, and Japan, local health authorities or health insurers use direct mailings to inform parents about the value and availability of preventive care services.

Given the continued use of private insurance in the United States, it is instructive to note that, in Germany, statutory health insurance funds ("sickness funds") must promote preventive health care. German health officials told us that most sickness funds send a letter to parents of newborns informing them of preventive care services. For example, the largest sickness fund in Germany, which insures about half of the population, sends new parents information on the schedule of examinations. Parents also receive information from other organizations such as public health offices in each municipality and the German Green Cross.

In each study country, health authorities also try to reach parents through periodic public campaigns. Campaigns generally include (1) multimedia health promotion; (2) distribution of literature to health care providers and facilities, especially facilities used by children from socially disadvantaged or immigrant families; and (3) parent-education workshops. Although not unique to these countries, these efforts complement other promotional activities already discussed. For example, England's national Health

Education Authority informs the general public about preventive care through national press and television advertising campaigns (e.g., to promote use of the combination MMR vaccine or immunizations in general). The Health Education Authority also provides training materials to health visitors and distributes the "Birth to Five" guide through local health authorities. In each health district, health education units make this and other information available to parents.

Outreach to Special Populations Used to Promote Participation

In most study countries, national or local health authorities take extra steps to inform parents when language barriers or other circumstances might limit the success of conventional outreach activities. In England, France, and the Netherlands, well-established programs provide information to socially disadvantaged and immigrant families. In Germany and Japan, outreach activities occur less frequently and are at the discretion of local public health offices. For example, a German health official told us that the federal government has sponsored programs to reach socially disadvantaged families, but that these programs were discontinued at the local level when federal funding ceased. However, in Germany and Japan, some local governments have taken the initiative to translate health information into languages spoken by major immigrant groups.

England, France, and the Netherlands use similar approaches to reach socially disadvantaged and immigrant families. For example, the Dutch National Health Education Office for Migrants publishes booklets, pamphlets, and audiotapes in the Turkish, Moroccan, Vietnamese, and Chinese languages. In addition, representatives of this office told us that many public health authorities train immigrant mothers to promote preventive care in their own communities and to distribute literature written in their native languages. In England and France, national and local health authorities have translated literature into other languages, hired interpreters, and trained mothers to assist with preventive care.

Tracking Systems Help Ensure Children Receive Services

Tracking that begins at birth is a way to better ensure that children receive the recommended preventive care services. The five study countries use some form of tracking, at the national or local level, to help ensure that children receive comprehensive and continuous preventive care. Two of the five study countries have national tracking systems; the other three countries use local systems to track children's care.

National Systems Used in Two Countries

In England and the Netherlands, national tracking systems help ensure that children receive continuous and comprehensive preventive care services. Health officials in these countries told us that they systematically collect information on individual children and the preventive care services they receive and maintain this information in computer and manual records. Health officials use these records to inform parents of scheduled services, identify children who have missed their immunizations, remind the parents to reschedule a visit, and notify home visitors when additional follow-up is required. These records may also be used to assess services provided to entire communities and to allocate limited health care resources for targeted outreach and promotional activities. In both countries, steps are taken to ensure that (1) accurate information is provided in a timely manner and (2) access to confidential health information is strictly limited to specific health care professionals.

Table III.1 summarizes the type of information collected to perform different tracking functions in England and the Netherlands.

Table III.1: Information Collected for Tracking Purposes

Information collected (inputs)	Tracking services performed: Input used	Tracking services performed: Tracking services
1.Birth details (i.e., name and address) 2.Infant mortality	1,2	Direct mailings soon after birth to provide health care information (e.g., recommended schedule of immunizations and preventive care visits)
3.Address changes 4.Childhood deaths	1,2,3, 4	Direct mailings before each scheduled immunization or preventive care visit
5.Services provided (e.g., vaccinations and checkups)	1,2,3, 4,5	Direct mailings for missed appointments; and monitoring coverage by address, city, and region, for community outreach or planning purposes
6.Outcome of services provided (i.e., any problems and referrals)	1,2,3, 4,5,6	Monitoring health of childhood population by address, city, and region for planning purposes
7.Providers of services (i.e., general practitioner, pediatrician, or community clinics)	1,2,3, 4,5,6, 7	Monitoring coverage and referrals by provider for follow-up purposes

Scope and Purpose of National Tracking Systems

District health authorities in England and provincial immunization administrations in the Netherlands use computer tracking systems to monitor immunizations provided to children. Although these two systems were developed to track immunization coverage, some local governments are expanding their systems to track other services such as preventive care examinations or health screens. Immunization is not mandatory in either of these countries.

The National Health Service finances the development and use of England's computer tracking system (i.e., Child Health System). The aim of the system is to increase the use of preventive care services and to maintain continuity of service for children who change addresses or treatment centers.[1] The system is composed of a child register and three modules for tracking childhood immunizations, preschool-age health, and school-age health. Any district health authority is free to use and alter all or parts of the system, provided it accepts the system's confidentiality and security protocol. We were told that while the child register and immunization modules are already used by most districts in England, use of the other two modules is not widespread.

[1]National Health Service, The Child Health System: An Introduction, Cardiff, England: Child Health Computing Committee Secretariat, Welsh Health Common Services Authority (1991).

In the Netherlands, provincial immunization administrations (located in each regional office of the National Association for Home Care) maintain computer immunization records on each child until they reach age 13. Although the current system only tracks immunizations, several provinces are developing software to track other preventive care services, such as early medical screening done by home visiting nurses.

Sources of Information for Tracking Purposes

As shown in table III.1, a computer tracking system requires birth data, current addresses, and information on services rendered by health care providers to track individuals and population groups over time. Responsible health offices in England and the Netherlands receive these data from a variety of sources.

As discussed earlier, birth notification provides health authorities in both countries with initial tracking information, including the names, birth dates, and addresses of every child born in the country. In addition, early home visits by public health nurses provide opportunities to correct or collect additional information, and in England, to obtain parental consent to enroll children in the immunization program. In the Netherlands, there is a financial incentive to register births because families are paid allowances for each child.

Current address information is obtained differently in the two countries. In England, because addresses are not registered with district health authorities, officials rely on general practitioners and home visitors to provide current information. By contract with district health authorities, general practitioners are required to provide the names and addresses of any new patients on their lists. However, home visitors are often the first to learn of new arrivals, early deaths, and other population changes and are required to inform district health authorities of these changes.[2] In contrast, all residents in the Netherlands must register address changes with their municipality. By agreement, the municipality shares this information with the provincial immunization authority.

In both countries, providers are required to report immunizations rendered and, when appropriate, other services provided, their results, and any patient referrals made. In England, general practitioners must report immunizations and other services to receive payment. However, to increase the timeliness of immunization reporting, England's Department

[2]Because England's process of updating addresses can be lengthy at times, the Department of Health accelerated its immunization schedule to allow providers to immunize more children before they move or their parents return to work.

of Health established additional monetary incentives.[3] Health officials in England told us that these incentives have contributed to recent improvements in immunization coverage. In the Netherlands, physicians are required to report immunizations to their provincial immunization authority to be reimbursed for administering vaccinations. Provincial health officials told us that reporting by clinic physicians is generally complete and timely.

National Tracking Systems Augment Outreach and Planning

In England and the Netherlands, authorities use tracking systems to assist with outreach, especially with immunizations, and community planning efforts. Using birth notifications and current addresses as a baseline, these tracking systems produce reminder cards to inform parents of scheduled immunizations for their children. Information on rendered immunizations is used to identify children lacking scheduled immunizations and to target outreach efforts through direct mailings or home visits by nurses. In England, some district health authorities also use the tracking system to monitor other recommended preventive care services and services for children with special needs.

The following information describes how these systems help track services provided to children.

England

In England, the immunization tracking system sends a reminder to parents before each scheduled immunization. The system is further programmed to make individual appointments with public clinic physicians or general practitioners at the times and days indicated by the health care provider. The more recent (and less used) preschool and school modules similarly use birth notification and neonatal discharge data to schedule children for developmental examinations and sensory screening tests. The system is used to record services rendered and any outcomes, such as adverse reactions to vaccinations. The preschool- and school-age modules have similar capabilities.

If confirmation of an immunization is not received, the system will reschedule the appointment and issue another notification. A home visitor goes to the homes of those children missing two appointments to discuss the importance of immunization or developmental examinations with the

[3]See p. 7 of letter for additional information.

mother, establish the reason for nonattendance, and encourage her and the child to attend.

The Netherlands

In the Netherlands, 4 weeks before the first scheduled immunization, the provincial immunization administration issues a vaccination passport and five personalized registration cards for each recommended vaccination. Additional cards are sent when the child is age 4 and 9 to track immunizations recommended for older children.

Reminder cards are issued if providers do not submit completed immunization cards within 12 to 24 weeks after the scheduled appointment, depending on the immunization. A card may be returned on which the parents indicate that they do not wish to have their children vaccinated, in which case, the authority enters an appropriate code into the computer and the parents will not be contacted again. Otherwise, a second reminder is sent. If in spite of these reminders, the child has not been immunized, a district nurse may visit the parents. These nurses manually track every child's preventive health care record (including immunizations and other services) in separate dossiers.

In addition to identifying children who have not received recommended services, both countries' tracking systems can provide an aggregate picture of services rendered for public health purposes. With this information, health officials can target outreach efforts or plan immunization campaigns.

In England, health authorities use the system to determine whether general practitioners have reached target levels of immunization and reimburse them accordingly. Health care professionals appointed to monitor coverage (i.e., the immunization coordinator) use this information to assess coverage for their district and work with the primary health care team (general practitioners, practice nurses, home visitors) to increase participation. The Health Education Authority also uses this information to target health promotion and advertising campaigns.

In the Netherlands, the provincial pediatrician is responsible for monitoring the immunization coverage for the province and for each clinic. If a clinic's coverage rate is low without cause, then the provincial pediatrician visits the clinic to determine the reason and to develop a strategy for increasing coverage. At the national level, the chief medical

officer monitors immunization rates by province and, if necessary, intervenes to increase coverage.

Confidentiality of Data Important in National Systems

In both countries, authorities have taken steps to ensure that personal health information is kept confidential. In England, a child's computerized health record can only be accessed with a password known to the child's general practitioner and home visitor. However, the district's chief medical officer and immunization coordinator can also access the files, but only those files within their district. Sharing a password is forbidden by law and, according to Department of Health officials, a breach of confidence has not occurred in 20 years or more. In the Netherlands, provincial immunization administration officials have access to personal computerized records only for residents of their province.

Laws and Regulations Provide Entitlement to Preventive Care

In England, France, Germany, Japan, and the Netherlands, laws and regulations form the legal basis for universal access to preventive health care.[1]

In England, the National Health Service provides medical and other services, including preventive care, to all residents. Entitlement to preventive care services for children is based on the National Health Services Act of 1977, which directs the Secretary of State to provide a comprehensive health service throughout England. The service includes facilities and services for young children. The law also states that these services should be free and that the government should promote them. In addition, the 1989 Children's Act sets out the basic rights of children and, in conjunction with the Education Act, the responsibilities and guidelines for helping children with special needs. Parents are responsible for providing reasonable care for their children and taking actions to improve their well-being.

In France, entitlement to preventive care services for young children is established in several laws. A 1945 law set initial guidelines for establishing facilities and free services to pregnant women and children (infant to age 6). Another 1945 law, and subsequent ministry circulars, entitled school children to health examinations at specific times and on demand. Other national decrees mandated preventive care examinations for children at specific ages. They also mandated the hiring of health professionals to provide these services. In 1982, the Decentralization Act transferred responsibility for funding and managing the PMI programs to the 96 departmental jurisdictions in the country. Finally, the Protection and Promotion of Family and Child Health Act of 1989 set further requirements for organizing children's health services, especially in preschools and homes. It also required that the social security office reimburse providers for mandatory examinations, special care at home, and care rendered in hospital clinics and other health facilities. Parents are responsible for selecting providers. They also have a financial incentive to follow the recommended schedule of preventive care visits for their children.

In Germany, children's entitlement to preventive care services is codified in the Code of Social Law. According to this law, health insurers, whether they are statutory sickness funds or private insurance companies, must provide information, counseling, and special services and must encourage a health-oriented lifestyle. The law specifically states that children to age 6

[1]The Medicaid program entitles American children from some poor families to preventive care.

have the right to preventive care examinations for the detection of diseases that may significantly impair their physical and mental development. In 1971, the National Association of Statutory Health Insurance Physicians (representing physicians who serve about 90 percent of the population) was charged with implementing a national preventive care program. Public health offices are responsible for supplementing the immunizations provided by the private sector, for providing health-related information to the public, for providing preventive care in schools, and for coordinating care for children with special needs. Most families receive payment vouchers from their insurer that cover the cost of preventive care services, while other families are reimbursed for provider fees. The Health Care Reform Act of 1993 allows for increased expenditures for preventive care even when other budget categories are reduced. Parents are responsible for finding a provider and following the recommended schedule of preventive care visits for their children.

In Japan, the Children's Charter of 1951 and the Maternal and Child Health Law of 1965 contain the basic rights of children and the government's commitment to them. While the charter establishes general principles, the Maternal and Child Health Law outlines the responsibilities of mothers, guardians of children, and the government to promote healthy children. The law stipulates that the government must conduct health examinations for children between age 3 and 4, and examinations of infants and children as necessary. Further, the government must provide parental guidance and advice on prenatal care, nutritional needs, and the special care of premature babies. National and local governments jointly pay for preventive services and arrange for the services to be provided at health centers, private clinics, hospitals, and schools. Parents are responsible for the overall health of their child. They have a financial incentive to follow the examination schedule set by the local government where they live (the services are free when they follow the schedule).

In the Netherlands, although preventive care services have been provided voluntarily since 1875, financial provisions entitling children to these services were initiated with the 1967 Exceptional Medical Expenses Act. Recently, the act was broadened to provide residents with basic health coverage (i.e., the government provides funding to regional sickness funds and private insurance companies to support this basic coverage). Despite these fundamental changes, families remain covered under the act for all preventive care services, including immunizations and home care. Families must be members of the National Association for Home Care (which costs $25 a year) to receive free services, but health officials told us that no

child is refused services. Parents are responsible for selecting a primary care physician for their children and for following the recommended schedule of preventive care visits.

Major Contributors to This Report

Human Resources Division, Washington, D.C.	Janet L. Shikles, Assistant Comptroller General Albert B. Jojokian, Assistant Director Maryanne P. Keenan, Assignment Manager Andrew K. Bhak, Evaluator
European Office	Thomas Laetz, Evaluator-in-Charge Michele Grgich, Evaluator Jeffrey L. Pounds, Evaluator
Far East Office	Priscilla Harrison, Site Manager Patricia K. Yamane, Site Senior Joyce L. Akins, Evaluator

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